

# THE COUNTERMINE CAPABILITY SET

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## Introduction

The nature of military operations has been changing over the last decade. While prosecuting and winning the Nation's conflicts is still the primary mission of the U.S. Army, other less-traditional missions have recently consumed many of our resources. For example, today we find our Army deployed worldwide to support "Operations Other Than War (OOTW)," which range from humanitarian assistance and nation building to peacekeeping, stability, and support operations. Each of these missions poses unique challenges to a force largely organized to defeat the Warsaw Pact threat of the 1980s, particularly in the area of countermine operations. Route and area clearing and proofing functions are of particular concern.

The landmine threat covers the spectrum from home-grown, simple mines to very sophisticated ones. While the threat from landmines has been present and increasing, on-hand countermine capabilities have been limited. Additionally, the process of obtaining supplementary mine-clearing equipment for deploying U.S. forces has been improvised or ad hoc at best. While commanders-in-chief (CINCs) rightfully demand a countermine capability for force protection, the Army has only sparsely fielded this capability on an urgent basis, largely through the procurement of equipment to support specific deployment missions.

## Background

The classic example of the Army's ad hoc process involved the U.S.

Army Europe (USAREUR) deployment of Task Force Eagle to Bosnia in late 1995. U.S. forces were deployed into an area where three warring factions had emplaced a variety of landmines during several years of military operations. These forces were often withdrawn from their locations in haste either as a result of being pushed out by opposing forces or because of negotiated agreements that precipitated their departure. Despite highly detailed records provided under U.N. accords, the mined areas were not completely marked, leaving behind a potential hazard in the wake of these withdrawals.

Faced with this mine threat, the CINCUSAREUR requested emergency procurement of countermine equipment in March 1996. For various reasons, it ultimately took about 6 months for the first countermine equipment to arrive in theater. Because items were acquired on an urgent basis, logistics and training support were lacking or less than optimum. During subsequent mine-clearing operations, there were casualties among military forces and the civilian population.

## Concept Team

Energized by this situation, the Project Manager for Mines, Countermine and Demolitions (PM, MCD), in cooperation with the Directorate of Combat Developments at the Maneuver Support Center, Fort Leonard Wood, MO, formed an integrated concept team (ICT) that generated a new requirement for a fully supported countermine capability set (CMCS). The CMCS could be rapidly constituted, regionally stored,

and quickly issued to deploying forces.

In late 1999, the ICT briefed senior officers in the Office of the Deputy Chief of Staff for Operations and the Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology. Following these briefings, the PM, MCD was charged with developing and deploying the CMCS as soon as possible to support worldwide operations.

The CMCS ICT was faced with the challenge of acquiring this contingency countermine capability without having to pay for outfitting the entire Army with countermine equipment. Additionally, the ICT recognized the critical need to provide full contractor logistics support (CLS) to the user.

Finally, the ICT recognized that an "out-of-the-box" acquisition solution would be required because of the worldwide responsiveness required of the CMCS, the low-density, nonstandard nature of the CMCS equipment, and the need to rapidly develop and field the CMCS within a constrained budget environment.

## Teaming

Weighing the available acquisition alternatives, PM, MCD personnel decided on a teaming approach with contractors that includes a full range of training and logistic support. Under this partnership, the contractor will provide the CMCS using commercial off-the-shelf and nondevelopmental countermine equipment. In addition to providing the hardware and integrating

government-furnished equipment, the contractor will develop the logistics support materials including training materials and technical manuals and supplemental data for existing commercial maintenance instructions.

The contractor will also provide maintenance allocation charts on required maintenance tasks, data on transporting CMCS equipment, and safety data for use by deploying soldiers.

Finally, a mechanism will be established to provide all CLS once the CMCS is fielded. This includes regional storage of the CMCS and all the necessary maintenance to keep the sets in a "ready-to-issue" and rapidly deployable condition. Once the sets are issued to using units, contractors will provide all the maintenance of the CMCS equipment above the unit level. This includes supply support for CMCS-unique spare and repair parts not already in the Army's supply system.

## Implementation

To implement such an ambitious endeavor, we recognized that early involvement of all stakeholders and innovative management approaches were required. Extensive efforts were made early in the development of the acquisition strategy to involve combat developers, training developers, testers, evaluators, logisticians, safety and contracting personnel, and others in an integrated product team (IPT) environment. Key to this was the interface between the ICT and the "Council of Colonels" at the Maneuver Support Center.

Early industry involvement was solicited via a March 2000 Industry Day and a public Web site. Comments were encouraged, particularly during Industry Day briefings and through two draft Requests for Proposal (RFPs).

The adopted contracting approach includes a hybrid-type contract containing cost-plus-fixed-fee efforts for the research and development aspects of the program, firm-fixed prices for hardware, and

time and materials payments with fixed labor rates for the CLS effort. Finally, an "all-or-none" award fee will be established for the CLS required during urgent deployments. This is intended to incentivize quality and timely contractor performance during critical periods.

A performance work statement (PWS) was developed to focus the contractor's efforts on outcomes rather than processes. As such, the PWS covers all aspects of the program and provides the contractor with a road map of the required outcomes desired by the PM, MCD for the various tasks.

## IPTs

Four separate IPTs addressing technical issues and testing; training, tactics, techniques, and procedures; supportability; and contracting and finance will manage the program. Following contract award, the contractor will participate as a member of these teams and will co-chair the supportability IPT. This is particularly important because the quality and level of CLS will ultimately determine the success of the CMCS Program. The goal is to provide timely, quality CLS that is transparent to the soldier-user while allowing adequate government/military control.

Another feature of the program is management of information through an IPT Web site established specifically for the CMCS effort. All IPT members can access the program logistics and other data and participate in the data review and development process much more effectively than the usual rounds of back-and-forth revisions between the contractor and the government.

The U.S. Army Training and Doctrine Command approved the CMCS Operational Requirements Document in August 2000, and a Department of the Army-directed CINC-validation process is ongoing. Two draft RFPs were posted publicly for industry review and comment. The final RFP was released on March 2, 2001.

## Summary

The CMCS Program is defined by its evolutionary approach, fielding existing commercial and nondevelopmental countermining technologies in a seamless manner. The capabilities afforded by the CMCS will be reviewed periodically and new technology insertions, such as those emerging from the Joint Area Clearance Advanced Concept Technology Demonstration, will be incorporated into the sets.

In summary, the goal of the CMCS Program is to field an effective, countermining capability to the warfighting CINCs without need of a massive logistics support infrastructure. The contractor will be a full partner in this effort, and the ultimate beneficiary will be the soldier, who will be protected from mines during future OOTW deployments.

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